STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

IN THE MATTER OF THE APPLICATION OF MAINE)	
SEA GRANT COLLEGE PROGRAM FOR AN)	FINDINGS OF FACT,
AQUACULTURE LEASE LOCATED IN THE)	CONCLUSIONS OF LAW
DAMARISCOTTA RIVER, NEWCASTLE, LINCOLN)	AND DECISION
COUNTY, MAINE)	

On December 29, 2005 Maine Sea Grant College Program of Walpole, Maine applied for an aquaculture lease totaling 0.3 acre in the coastal waters of the State of Maine, located in the Damariscotta River in Newcastle, Lincoln County, Maine. The applicant requested the lease for a term of ten (10) years for the purpose of cultivating American oysters (*Crassostrea virginica*) using suspended culture techniques. The application was accepted as complete on December 29, 2005. A public hearing on this application was held on May 31, 2006 at 6:00 p.m. in Newcastle.

Approval of aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of the Department of Marine Resources (DMR) if it is determined that, taking into consideration the number and density of aquaculture leases in an area, the project will not unreasonably interfere with the ingress and egress of riparian owners; navigation; fishing or other uses of the area; significant wildlife habitat and marine habitat or the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna; or the public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will be in compliance with visual impact criteria adopted by the Commissioner relating to color, height, shape and mass.

Evidence Introduced Concerning the Nature

and Impact of the Proposed Lease

The evidentiary record before the Department regarding this lease application includes the Department file (Exhibit 1), including the application (Exhibit 2) and the Department site report (Exhibit 3), and the record of the May 31, 2006 public hearing. At the public hearing, testimony was given by Dana Morse, representing the applicant, the Department's Aquaculture Environmental Coordinator Jon Lewis, Newcastle Harbormaster Paul Bryant, and three members of the public.

According to the application and Mr. Morse's testimony, the proposed lease is sought to raise American oysters on a lease site totaling 0.3 acre (75' x 175'), for a lease term of ten (10) vears. Mr. Morse testified that he is an extension agent with the Maine Sea Grant College Program and the University of Maine Cooperative Extension Program. He testified that the lease is being sought in conjunction with Sea Grant's Oyster Garden Program. The program is an 18-month educational program in which students learn about growing oysters, as well as about estuarine ecology, shellfish biology, public health, and other related topics. The proposed lease site would accommodate up to 20 participants in the Ovster Garden program. The proposed lease activities would consist of growing shellfish in floating bags. There would be a maximum of 200 bags on the site (10 per student), arranged in two long-line systems, in four rows of fifty. Each participant of the Oyster Garden Program would receive approximately 1,000 oyster seed, which would be obtained from Muscongus Bay Aquaculture in Bremen, Maine. The seed would be placed in floating bags on the lease site in June or July. Thereafter, the participants would make weekly or bi-weekly visits to the site to monitor growth and perform maintenance. Each visit would be approximately one hour. In response questions regarding the potential for 20 vessels working the site at any one time, Mr. Morse testified that the maximum number of vessels that could comfortably work the site at one time would be four. He agreed to a condition on the lease limiting the number of vessels on the site at any one time. Mr. Morse also testified that he would visit the site at lease every other week and understands that the Maine Sea Grant College Program would be fully responsibility for the lease site.

According to the applicant, noise will be minimal at the lease site. Boats with outboard motors would be the only powered equipment on site. The applicant does not plan to use lighting at the lease site. The aquaculture gear planned for use on the site would be comprised of black bags, black floatation, wood spreader bars, and visible, white or orange corner markers.

In accordance with Department regulations, 2.10(3), the applicant provided an environmental characterization of the proposed lease area. According to this environmental characterization, the proposed lease site was chosen for its excellent growth characteristics and its proximity to the town landing. Mr. Morse testified that this location is optimal for the length of the Oyster Garden Program, in that an oyster can be grown in 18 months on this part of the river. According to the application, the proposed site is fairly shallow, with only a foot of water covering most of the site at low tide. Current speed is generally less than 1 knot and flows in a northeast/southwest direction. Additionally, the proposed lease site is not located within an Essential Habitat.

According to the application, the proposed lease site is located such that it should not impede access of riparian landowners. Current uses of the proposed lease site are limited to recreational boating, sailing, kayaking, and some recreational fishing. No commercial activity, such as lobster fishing, crabbing, urchin diving, or clam digging is known to occur on the proposed lease. Additionally, according to the application, the proposed lease is located well outside the navigational channel.

The Department's Aquaculture Environmental Coordinator (AEC) and his assistant conducted a site visit at the proposed lease area on March 7, 2006. During the site visit, water depth at the proposed lease site was approximately three feet. An underwater video camera was used to film the bottom of the lease site from the vessel. The AEC created a site report summarizing the information obtained during the site visit and provided testimony at the hearing regarding the report. The AEC noted in his report and testimony that he and his assistant have made numerous visits to the proposed lease area during the summer months and have SCUBA

dived in the area of the proposed lease on previous site visits. According to the AEC's report, the proposed lease is located in the Damariscotta River in water depths ranging from 3 to 6 feet approximately two hours before low water and a minimum of 1 foot at mean low water. The bottom of the proposed site is comprised of firm mud. The currents in the area of the proposed lease are tidally driven in a northeast/southwest direction. Flora and fauna observed during the site visit include a common occurrence of razor and soft-shell clam hash and an occasional horseshoe crab. During more productive times of the year, the AEC noted in his report that he would expect additional fauna such as the common periwinkle, hermit crab, rock crab and horseshoe crab to be found in the area. According to the site report, the proposed lease site is not located within an Essential or Significant Wildlife Habitat.

According to the AEC, the proposed activities will not interfere with navigation or riparian ingress and egress. The proposed site is located along the western shore of the river, outside the main navigational channel. There is a minimum of 650 feet between the eastern boundary of the proposed lease site and the navigational channel. Additionally, there is a minimum of 200 feet between the proposed lease and the shore at mean low water; 350 feet between the proposed lease site and an aquaculture lease located to the north; and 375 feet between the proposed lease and an aquaculture lease located to the east. According to the AEC's report, the proposed lease is located to the west of a mooring field. Due to shallow water depths, no moorings are expected within the immediate vicinity of the proposed lease. According to the AEC, the proposed lease activities are not expected to interfere with mooring access for boats under power or sail.

According to the AEC's report, no fishing activity was observed within the boundaries of the proposed lease site during the site visit. Due to shallow water depths, lobster and crab fishing is likely limited in the proposed lease area. Recreational striped bass fishing likely occurs in the area. Sufficient room will remain around the proposed lease site for fishing. The AEC testified that he spoke with fishermen in the area and they stated that the proposed lease area is not a "hot spot" for striped bass fishing. There are 12 aquaculture lease sites within one

nautical mile of the proposed site. According to the AEC, the proposed lease activities will not interfere with the other leases in the area. The AEC noted that the proposed lease is being sought as an alternative to obtaining several limited purpose aquaculture licenses in the river, as had been done for the first class of the Oyster Garden Program. According to the AEC's report the proposed lease is located in an area classified as open/approved for the harvest of shellfish by the Department's Water Quality Division.

Paul Bryant, Harbormaster for Newcastle and Damariscotta provided written comments and testimony at the hearing. According to Mr. Bryant, the proposed lease is not located within a designated channel; there are no moorings permitted within the proposed lease boundaries; the proposed lease would not interfere with storm anchorages; and the proposed lease would not interfere with riparian access. Mr. Bryant stated that recreational fishing and sailing are common in the area. He testified that he is concerned that there be enough room for the sail boats to tack through the area, and that they would still have enough room if this lease were present.

Two riparian landowners provided written comments and testified at the hearing. They stated that they have been supporters of all uses of the river, and support a balance of those uses. They testified that aquaculture on the Damariscotta River is reaching a tipping point and the proposed lease is going too far. They also stated that they are concerned with the potential number of people who would be traveling too and from the proposed lease on a regular basis and they are concerned about the potential for noise.

One participant in the Oyster Garden Program testified at the hearing. He stated that he doesn't have a boat and he and the other participants intend to team up for site visits to reduce traffic. He also stated that he would be on the site for one hour per week.

Findings of Fact

The 0.3-acre proposed lease site is located west of the navigational channel of the Damariscotta River in water depths of 1 foot at mean low water. There are no moorings located in the area of the proposed lease. There is ample room surrounding the proposed lease site for vessels to maneuver in the lease area. The proposed lease would be located 650 feet from the channel, 200 feet from the shore and 350-375 feet from nearby aquaculture leases. The proposed lease is intended to accommodate up to 20 participants in the Oyster Garden Program. This could create a situation where there would be a potential of 20 vessels in the lease area at one time. For the safety of the participants and so as not to interfere with navigation and riparian access, the lease will be conditioned to allow no more than four vessels to work the lease site at any one time. Based on this evidence, I find that the lease will not unreasonably interfere with navigation or the ingress and egress of riparian owners.

Recreational fishing, sailing, and kayaking occur in the area of the proposed lease. The proposed lease site is not a hot spot for striped bass fishing on the river. The 75' x 175' lease site will not interfere with the ability to sail or kayak through the area of the proposed lease. The nearest aquaculture lease sites are located 350 feet to the north and 375 feet to the east of the proposed site. The area of the proposed lease is classified as open for the harvest of shellfish. Based on this evidence, I find that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

The bottom of the proposed site is comprised of firm mud. Local flora and fauna consists of razor and soft-shell clam hash, and horseshoe crabs. Common periwinkles, hermit crabs, and rock crabs are also likely to occur in the area. Water depths are one foot at mean low water. The currents in the area of the proposed lease are tidally driven in a northeast/southwest direction and are less than 1 knot. The proposed lease site is not located within an Essential or Significant Wildlife Habitat. Based on this evidence, I find that the proposed activities will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna.

All seed shellfish will be obtained from Muscongus Bay Aquaculture in Bremen, Maine.

Based on this evidence, I find that there is an available source of American oysters.

The proposed lease site is not located within 1,000 feet of any public beaches, parks, docking facilities, or conserved land. Based on this evidence, I find that the proposed lease site activities will not unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency.

Boats with outboard motors would be the only powered equipment on site. Site visits would consist of approximately one hour per week per student. The applicant does not plan to use lighting at the lease site. Based on this evidence, I find that the proposed lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

The aquaculture gear planned for use on the site would be comprised of black bags, black floatation, wood spreader bars, and visible, white or orange corner markers. I find that the proposed lease will comply with visual impact criteria.

Conclusions of Law

Based on the above findings, taking into consideration the number and density of aquaculture leases in the area, I conclude that:

- 1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;
- 2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation;
- 3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area;
- 4. The aquaculture activities proposed for this site will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna;
- 5. The applicant has demonstrated that there is an available source of American oysters;
- 6. The aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency;

- 7. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and
- 8. The aquaculture activities proposed for this site will be in compliance with visual impact criteria.

Accordingly, the evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

Decision

Based on the foregoing, the Commissioner grants the applicant's requested aquaculture lease of 0.3 acre from the date of this decision for the purpose of cultivating American oysters (*Crassostrea virginica*) using suspended culture techniques. The applicant shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The applicant shall post a bond or establish an escrow in the amount of \$5,000 conditioned upon their performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

Conditions to be Imposed on Lease

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease:

- (1) Navigation and recreational boating and fishing shall be allowed on the open areas of the lease;
- (2) the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80; and
- (3) There shall be no more than 4 vessels on or near the lease area at any one time for the purpose of seeding, harvesting, monitoring, maintenance, or other activities associated with the lease site.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

Dated:	
	George D. Lapointe (Commissioner)
	Department of Marine Resources